

CLAIMS

1. A device for filtering fluids conveyed at high pressure
5 with an inlet opening (21), an outlet opening (24) and a
metal housing (2) enclosing a filter chamber (23) and
having a service opening (3, 4) closed by means of a lid
(14, 15), also of metal, which is seated by the action
10 of a contact force on a rim portion (5, 6) surrounding
the service opening (3, 4) in direct contact with the
metal of the housing (2), the rim surface (7, 8) of the
rim portion (5, 6) associated with the lid (14, 15)
sloping between its inner boundary edge (10) that is
15 associated with the service opening (3,4) and its outer
boundary edge (12) such that the rim surface (7, 8)
forms an angle (13) deviating from 90° with the adjacent
inside surface (9) and outside surface (11) of the rim
portion (5, 6) and the contact surface between the lid
20 (14, 15) and the rim portion (5, 6) is limited to a
fraction of the rim surface (7,8), and wherein there is
arranged inside the filter chamber (23) a filter element
(26) through which fluid flows on its way from the inlet
opening (21) to the outlet opening (24).
- 25 2. A device according to claim 1, characterised in that the
filter element is a filter body (26) which is seated on
one of the walls that define the filter chamber (23) and
through which the fluid can flow in the region of at
least one of its peripheral surfaces.
- 30 3. A device according to claim 2, characterised in that the
sealing surface (27) of the filter element (26)
surrounds the outlet opening (24).

4. A device according to either claim 2 or claim 3,
characterised in that the filter element (26) is biased
by a resilient force acting from the filter chamber (23)
on the sealing surface (27).
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5. A device according to one of claims 2 to 4 characterised
in that the filter element (26) is cylindrical in shape.
6. A device according to claim 5 characterised in that the
10 service openings (3,4) are formed on the end faces of
the tubular housing (2).
7. A device according to any one of the preceding claims,
characterised in that the housing (2) is tubular.
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8. A device according to any one of the preceding claims,
characterised in that the lids (14, 15) are mutually
tensioned.
- 20 9. A device according to claim 8 characterised in that the
tensioning is obtained by tension screws or tension
bolts (30) that act like expansion screws.
10. A device according to claim 8 characterised in that the
25 inlet opening (21) is formed in one of the lids (14,15)
and the outlet opening (24) is formed in the other of
the lids (14, 15).